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| APPLICATION NO                          | ). i   | FILING DATE | FIRST NAMED INVENTOR     | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |
|---|--------|-------------|--------------------------|---------------------|------------------|--|
| 10/634,555                              |        | 08/05/2003  | Hock Gan                 | 920476-94604        | 6023             |  |
| 23644                                   | 7590   | 07/28/2005  |                          | EXAM                | EXAMINER         |  |
|   | & THOR | NBURG       | AFSHAR, KAMRAN           |                     |                  |  |
| P.O. BOX 2786<br>CHICAGO, IL 60690-2786 |        |             |                          | ART UNIT            | PAPER NUMBER     |  |
| •                                       | ,      |             |                          | 2681                |                  |  |
|   |        |             | DATE MAIL ED: 07/28/2005 |                     |                  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.  | Applicant(s)  |              |  |  |  |  |
|--|--|---|--------------|--|--|--|--|
|  | 10/634,555   | GAN ET AL.  |              |  |  |  |  |
| Office Action Summary  | Examiner /   | Art Unit  |              |  |  |  |  |
|  | Kamran Afshar, 571-27  |   |              |  |  |  |  |
| The MAILING DATE of this communication ap<br>Period for Reply  | pears on the cover shee  | t with the correspondence add   | dress        |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a replif in the period for reply is specified above, the maximum statutory period.  Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, however, ma<br>ly within the statutory minimum of<br>will apply and will expire SIX (6) I<br>e, cause the application to becom  | y a reply be timely filed  thirty (30) days will be considered timely  MONTHS from the mailing date of this co e ABANDONED (35 U.S.C. § 133). |              |  |  |  |  |
| Status   |  |   |              |  |  |  |  |
| 1) Responsive to communication(s) filed on   | •  |   |              |  |  |  |  |
|  | s action is non-final.   |   |              |  |  |  |  |
| ,—   | Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. |   |              |  |  |  |  |
| Disposition of Claims  |  |   |              |  |  |  |  |
| 4) ⊠ Claim(s) <u>1-18</u> is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1-18</u> is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/  | wn from consideration.   |   |              |  |  |  |  |
| Application Papers   |  |   |              |  |  |  |  |
| 9) ☐ The specification is objected to by the Examin  10) ☑ The drawing(s) filed on 24 November 2003 is/  Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Examin   | are: a)⊠ accepted or bedrawing(s) be held in abection is required if the draw  | eyance. See 37 CFR 1.85(a).<br>ving(s) is objected to. See 37 CF  | FR 1.121(d). |  |  |  |  |
| Priority under 35 U.S.C. § 119   |  |   | -            |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureat * See the attached detailed Office action for a list  | ts have been received.<br>ts have been received i<br>prity documents have be<br>nu (PCT Rule 17.2(a)).   | n Application No een received in this National  | Stage        |  |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date   | Paper  | ew Summary (PTO-413)<br>No(s)/Mail Date<br>of Informal Patent Application (PTC<br>  | )-152)       |  |  |  |  |

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#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are directed to software and are, therefore, per se not tangibly embodied. Claim 14, which recites that the register of claim is "implemented in the form of software", provides evidence of a non-statutory embodiment, which renders claim 1 non-statutory. There is nothing in dependent claims 2-13 which render the claimed invention statutory.

## Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 4. Claim 14 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is not any

description that the register is implemented in the form of software. The operation of the register could be implemented in the form of software but not the register itself.

### Claim Objections

5. Claim 16 is objected to because of the following informalities: claim 16 is a method claim, which depends on a system claim 1. Appropriate correction is required.

#### Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 1-6, 14, 16-17, 18, are rejected under 35 U.S.C. 103(a) as being unpatentable over Coulombe (U.S. Patent 6,115,463) in view of Klein (U.S. Patent 5873,101) further in view of Price (U.S. Patent 6,144,867).

With respect to claim 1, 5, 17, 18, discloses a method, a sequence of signals (See e.g. signals 64, 66, 68 of Fig. 3) and / or a register (i.e. Home location register, (HLR)), which is inherently used for maintaining data (See i.e. maintained information like current subscriber data information, Co. 1, Lines 18-20) relating to current location of users of a network (See e.g. Co. 5, Lines 36-44, networks of Figs. 2, 4, 6) for use by the network, the register (See e.g. 42(1) of Figs 2-3, 92(1) of Fig. 5, 142(1) of Fig. 6) being arranged for coupling to a mate register (See e.g. 42(2) of Figs 2-3, 92(2) of Fig. 5, 142(2) of Fig. 6) at a remote location for back up of the data (See e.g. Co. 1, Lines 38-42). Further, Coulombe disclose the subscriber and or the user data back-up (i.e. storing, back-up, migration, transferring, etc.) are carried out by segmentation over the signaling system to the mate register (See e.g. Co. 3, Lines 58-64). In an analogous, Klein, in detail, teaches a method and / or a system of back-up and restoring segmented data (i.e. one or some of the segments), which are transferred from one register to another register (See. i.e.

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storage medium, memory, etc., Co. 4, Lines 64-67) either temporarily and / or permanent (See e.g. Figs. 2-3, Co. 2, Lines 37-44). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to provide above teaching of Klein to Coulombe to provide a method and/ or system for the transfer of a set of data blocks from a register (i.e. source register) to a destination register to prevent loss of the subscriber data and / or maintaining. The motivation comes from Price to facilitate a flexibility to the system as subscribers and / or users can be reallocated from one home locations register to another, e.g. to effect load sharing, without the needs for any changes in the system routing (See e.g. Co. 2, Lines 33-37).

Regarding claim 2, Coulombe obviously discloses the maintaining involve storing and updating the data and respond to network request access the data (See e.g. Co. 4, Lines 38-44).

Regarding claim 3, Coulombe discloses a home location register (See e.g. 42(1), 42(2) of Figs 2-3).

Regarding claim 4, Coulombe obviously discloses arranged to carry out the handover on a per user basis (See e.g. Co. 7, Line 67 - Co. 6, Line 8, extracting a subscriber and / or a user data and transferring from one node to another node).

Regarding claim 5, Klein obviously discloses the segmentation not being matched at the mate register (See e.g. without analyzing the content of the data segment, Co. 2, Lines 339-42).

Regarding claim 6, Price discloses a central controller (See e.g. 14 of Fig. 1).

Regarding claim 14, Klein discloses implemented in the form of software (See e.g. Co. 4, Lines 15-16).

Regarding claim 16, a communications service over a network having the register (See e.g. 42(1), 42(2) of Figs 2-3).

### Allowable Subject Matter

8. Upon proper overcome of the rejections as discussed above in items 1-4, Claims 7-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 7, the prior art of record fails to disclose or render obvious that is arranged to send a message to the mate register, setting the user's status to standby and diverting to the mate register any requests from the network to access the data for that user.

Regarding claim 8, the prior art of record fails to disclose or render obvious that is arranged to receive a handover request from the mate register for a given one of the users, to set a user's status to active, and to respond to any requests from the network to access the data for that user.

Regarding claim 9, the prior art of record fails to disclose or render obvious that is arranged to initiate a handback operation for a given one of the users, by requesting a copy of the data from the mate register, and once received, setting the user's status to active, and responding to any requests from the network to access the data for that user.

Regarding claim 10-11, the prior art of record fails to disclose or render obvious that is arranged to respond to a handback request from the male register for a given one of the users, by sending a copy of the data to the mate, setting the user's status to standby, and diverting to the mate register any request from the network to access the data for that user; and respond to the handback request only when any transaction has ceased.

Regarding claims 12-13 the prior art of record fails to disclose or render obvious to cease backing up data with the male register after a handover has been initiated; and arranged to request a full copy of data from the male register for users of the handed over segment for whom the mate register is normally in active state.

#### Conclusion

- 9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- a) Delaney (U.S. Pub. No.: 2005/0101297 A1), which discloses Methods and systems for distributing application data among multiple processing modules in a telecommunications network element having a distributed internal processing architecture.
- b) Miriyala (U.S. Pub. No.: 2003/0078042 A1), which discloses Location based grouping for wireless network coverage area.

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Any inquiry concerning this communication or earlier communication from the examiner should be directed to Kamran Afshar whose telephone number is (571) 272-7796. The examiner can be reached on Monday-Friday.

If attempts to reach the examiner by the telephone are unsuccessful, the examiner's supervisor, **Feild, Joseph** can be reached @ (571) 272-4090. The fax number for the organization where this application or proceeding is assigned is **571-273-8300** for all communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kamran Afshar

SUPERVISORY PATENT EXAMINER